July, 27 1999

TO: Magalie Roman Salas
Office of the Secretary
Federal Communication Commission
445 12th Street S.W., Room TW-B204f
Washington, D.C. 20144

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From: Michael A. Sullivan
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(617)-628-3377

Re: CC Docket No. 99-200, Notice of Proposed Rule Making

Dear Ms. Salas:
Enclosed are my comments in regard to CC Docket No. 99-20

Thank You
Michael A. Sullivan

CC: Judy Boley
Timothy Fain
International Transcript Service, Inc.
Alvin McCloud

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## I. Introduction

The reason I first got involved in area code decisions was the original 1996 Massachusetts Department of Telecommunications and Energy (DTE) plan to split the City of Somerville Ma. into two separate area codes. After speaking to Alderman Jimmy Halloran, a local resolution was forwarded to the DTE, which resulted in a decision not to split the city. From that point on I realized that something could be done by speaking up. Since that time State Senator Charles Shannon has filed bills on my behalf in the Ma. legislature in two consecutive legislative sessions, concerning the use of separate technology networks. I have been granted "Limited participant status with right to file" in DTE 99-11 Area Code Relief, and DTE 98-38 Area Code Conservation.

## II. Area Code Relief-Overview

In the realm of area code relief the FCC should allow states greater latitude in deciding their own destiny. In order for the State Commission to do their work properly they must be given the proper tools. The FCC is looking at the nation as a whole, individual states can solve their problems more efficiently because they are closer to the source. Understanding the need for guide lines to uniformity, hopefully they could be somewhat broad, so states can tailor to their own individual needs.

The State of Massachusetts adopted a geographical split in 1988 creating the first 617 and 508 area codes with little pain. The ensuing splits showed an element of "The Law of Dominishing Returns". The 617 and 508 area codes as existed in 1997, lay upon existing rough geographic boundaries; 617 in the metropolitan area and, 508 west of route 128 and 413 west of the Connecticut River. The eventual splits to the 781 and 978 have no existing boundaries with 781 shaped like a crescent moon in the middle of nowhere with no known boundaries on either side. The lack of known boundaries now brings about unexpected cost. What is the cost of the lost man hours spent having to look up new area codes? What is the cost of wrong numbers with 4 area codes in Eastern Ma. ,with 4 more on the way. What is the societal cost of confusion? Residents of the state can travel 20 minutes by car and cross through 3 different area codes.

The implementation of overlays may solve some problems, but unless separate technology networks are also established, you are only solving half the problem. Data traffic surpassed voice traffic in 1998 and could account for up to 80 percent of all traffic the next few years. Cell phones and pagers are part of everyday life. The internet is ever-expanding into every home and business. Designated data lines with automatic speed dials should be put into a separate network using one or more digits like a country code ex. (13-*npa-nxx-xxxx*) with the(*npa-nxx-xxxx*)staying the same for clerical purposes. It does not matter to a machine how many numbers it dials., it is a machine interacting with a machine. Cell phones and pagers are another example of technologies that should be placed in separate networks. Unlike hard wire technology they are "free-floating", and not based on narrow local calling areas. This would also ease the switch to "caller pays", if the FCC later decides to go that route. The boom of internet popularity and expanded use of faxes and modems has expanded the demand for secondary residential lines. In

July 1999 the FCC granted Bell Atlantic the right to charge more for these lines. Business lines are also charged at a different rate so in effect the second network is already established.

The FCC should carry this one step further and allow the creation of allow the creation of primary and secondary networks for business and residents, if state commissions so choose. Under this plan each resident could declare one primary number in the existing Numbering Plan Area (*NPA*). Most calls made to businesses Are to one main number and are than rerouted to other to other numbers. These secondary numbers could be placed into overlays, thus freeing up a great deal of numbers in the existing *NPA*. The numbers that are freed up could then be into number pools which could be used by Competitive Local Exchange Carriers (*CLEC*) Thus improving competition.

Second lines and business lines are charged more money. Part of these surcharges could be earmarked to offset any added expenses that might occur.

## A. Geographic Splits

As a national policy, geographic splits serve there purpose if they cover large geographic areas with well known boundaries. As the areas to be split become smaller and smaller, and the lines of demarcation more blurry, "The Law of Diminishing Returns" starts to take over. In Ma after the 617\508 split people knew the line of demarcation was roughly route 128. If they called a boundary town and did not get who they were looking for they called the other area code. Since 781 and 978 were added people have to constantly refer to a map.

## B. Overlays

The main reason for opposition to overlays was fear of the confusion that could ensue when two area codes occupied the same geographical area, confusion that could only be compounded when lines in the same building have different numbers. Another fear was that competition could never take hold if *CLEC*'s were given inferior *NXX* numbers. In Ma with area codes chopped into such small areas people are getting used to giving out a ten digit number, if they are not sure of the other persons location. With the advent of Local Number Portability (*LNP*) and number pooling, There should be little concern about competitive reasons for opposing overlays and "inferior *NXX* numbers."

## C. Technology Specific Overlays

1. Dedicated data lines (*DDL*) are probably the best example of technology specific overlays. In 1998 data lines overtook voice traffic as the most common use of phone lines. There is no reason for *DDL* to be using up the resources of the North American Numbering Plan (*NANP*). These machines use a mechanism which is a glorified speed dial. It doesn't matter to the machine how many numbers it dials. *DDL* should be put into an entirely new separate network. This could be accomplished by using a twelve number network using the same basis as a country code, with all other numbers except the country code like prefix remaining the same for clerical purposes. The existing numbers

could then be returned to a number pool to be divided up amongst *CLEC* giving them a larger share in existing desirable *NNX* numbers.

2. Wireless phones and pagers should also be put into separate networks. Wireless devices are "free-floating" and don't need specific *NNX* codes. Most cell plans are based on the minute in expanded calling areas. Having Cell phones in their own separate *NPA* would also make it easier to adopt a "caller pays" system in the future.

3. Primary and secondary networks could be developed to allow residents and businesses to declare one primary number in a previously existing desirable *NPA*, with all secondary numbers put into overlays. Most businesses use a form of this system already, routing all calls from one primary numbers to secondary lines which could be into the overlay freeing up numbers for the pool for the use of *CLEC*'s. Residential Customers are currently being charged more for secondary lines, just as business lines are charged more. Thanks to the phone companies system of surcharges they have already in essence created an overlay, it is time to take this one step further and create a true overlay. Under this primary number system people could declare any technology they please be it cell phone or hardwire to be their primary number so there is no discrimination against certain technologies because it is the choice of the consumer. This idea could be carried one step further and allow the primary network to remain 7 digits in expanded calling areas, if you so choose

## III. Conservation

1. Rate center consolidation is probably the easiest means of extending *NANP* life expectancy. In Ma there are currently 202 local calling areas which have existed since 1909. That many calling areas might have accurately portrayed cost factors when originally constituted. Today's technology allows calls to be made at the same cost weather the call is 3 miles or 500 miles. This is no longer a matter of operator pulling wires to connect to another operator. The newer systems were built with money provided by an oligopoly. It would be appropriate if the rate payers were afforded some of the benefits of the newer technologies in the form of expanded local calling areas for lower rates. The Office of the Attorney General in Ma has submitted two plans to the DTE to accomplish this. The FCC might be wise to order State Commissions to look at such proposals while examining area code relief. In Ma the well known borders of the former 617, 508, and 413 area codes could be established as local calling zones. The 781 and 978 area codes could be given "reverse overlay" status and used to separate technology networks.

2. 1000 number blocking is an option that should be granted to states immediately if they are in jeopardy situations. The states of Ma. and Pen. Petitioned the FCC to hand down immediate piecemeal rulings, to clear cut solutions as opposed to waiting an extended time period, to address these problems as one grand design ruling. Cell phone companies alone, with extended calling areas and efficient use of numbers, provide enough reason to act immediately on this aspect.

**3.** Number pooling could produce two benefits in a primary number system. The efficient use of numbers. The benefits to competition if number use were pooled for *CLEC*'s use to provide numbers in "Desirable NPA."

**4.** Now technology itself is providing for a form of number conservation. *DSL* lines give people the option of doing more than one thing over the same line. Cell phone technology allows for phone and paging to be combined. Cable wires are configured to carry voice, internet, and cable. With these options and more coming it is wise to try to contain the numbers we are currently giving out to preserve a well known system.

## IV Summary

Competition has arrived in local phone markets. Incumbent Local Exchange Carriers (*ILEC*) are being or are about to be challenged on various fronts. AT&T, and other regional phone and cable companies are ready to compete. In the past the FCC has made rulings to ensure the promotion of competition. Now that it has arrived it is time to return to an orderly system that is both cost and user friendly. It is time to remake the system that has served us so well and adapt it for the future.

Conservation measures can buy some time although the real need is to adopt stand alone technology networks, which can be dealt with in specific ways according to the needs of those specialized networks. Hardwire wireless and *DDL* are completely different technologies and should be dealt with as such. Hard wire systems are set up for fixed calling areas. Wireless is based on a free floating system with larger calling area billed by the minute. Designated data lines are machines interacting with machines.

With different price and billing structures, these networks are already separate. Formalized primary and secondary systems, with separate technology networks would make for less confusion and greater ease in tailoring these needs to individual needs of these networks. Making general rules to treat all technologies equal is long on principle but short on practicality. It is time to stop trying to be all things to all people, and treat the networks for what they are apples and oranges, very separate and unique entities.

Steering at an estimated 50 to 150 billion dollar cost to redo the system should provide ample reason to endorse wholesale radical changes as opposed to incremental patch work. The FCC should be more concerned with societal costs than with industry consensus the only consensus amongst the industry is that each company is looking for an edge in the protection and enhancement of market share. The FCC should draw up broad based regulations on their own terms for societal good and let the market place worry about industry costs. If deregulation was meant to bring about competition, the FCC should make companies compete based on customer service, not the effect on the balance sheet of those in the industry.